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REMARKS

Applicant believes that the wrong claim set was examined. The correct claim set to be examined was presented in the PCT Article 34 Amendment posted June 4, 2004 and an English translation was included with the national stage request filed on April 15, 2005. A copy of the Article 34 Amendments is enclosed herewith for the Examiner's convenience.

Claims 2, 3 and 5-8 remain pending in the application. Reconsideration is respectfully requested in view of the following remarks.

Claim Rejections – 35 USC § 102

Claims 1, 3, 4 and 7 are rejected under 35 USC § 102(b) as being anticipated by McLellan et al. (US 6,498,099). Applicant respectfully traverses this rejection.

Claims 1 and 4 were previously canceled under PCT Article 34. Claim 3 was previously revised under PCT Article 34 to depend upon claim 2. Claim 7 was previously revised under PCT Article 34 to depend upon claim 5. Applicant respectfully submits that the rejection is moot. Withdrawal of the rejection is respectfully requested.

Claim Rejections – 35 USC § 103

Claims 2, 5 and 6 are rejected under 35 USC 103(a) as being unpatentable over McLellan et al. Applicant respectfully traverses this rejection.

Claim 2 requires indenting a main cutting notch on at least one of obverse and reverse surfaces of a lead terminal in a step before molding a molded part while leaving an unnotched portion between the main notch and each longitudinal side surface of the lead terminal, indenting a cutting sub-notch at the unnotched portion in a step after molding the molded part, and then cutting the lead terminal at the main notch and the sub-notch.

The present process of leaving the unnotched portion between the main notch and each longitudinal side surface of the lead terminal is advantageous in that it helps prevent molten synthetic resin from entering and curing in the main notch during molding (see page 14, lines 4-10 of the present specification). Traditionally, when a lead terminal for a

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package type electronic component is cut, cutting burrs are produced and projected out from the lower surface of the lead terminal and the lead terminal is lifted from the circuit board by the cutting burrs. This not only inhibits soldering of the lead terminal to a circuit board but also degrades heat dissipation from the electronic component to the circuit board (see, e.g., page 2, line 27 to page 3, line 13 of the present specification). To resolve these problems, a main notch can be indented on the lead terminal prior to the molding process so that, after the cutting process, the cutting burrs formed are kept within the notch (see, e.g., page 5, lines 5-10 of the specification). However, further problems come up. Because the main notch is indented on the lead terminal before molding, the molten synthetic resin is likely to enter into and cure in the main notch during the process of molding. This causes burrs of synthetic resin to form inside the main notch. Subsequently, a deburring operation has to be conducted to remove the burrs of synthetic resin after the molding process and before cutting the lead terminal (see, e.g., page 5, lines 10-25 of the present specification). The present process of leaving the unnotched portion between the main notch and each longitudinal side surface of the lead terminal helps prevent molten synthetic resin from entering and curing in the main notches during the molding process (see, e.g., page 14, lines 4-10 of the present specification).

Further, the present process of indenting a cutting sub-notch at the unnotched portion after the molding process helps keep the cutting burrs within the sub-notch and thus prevent the cutting burrs from projecting beyond the lower surface of the lead terminal. The impact of indenting the sub-notch is relatively less than that required for indenting a notch across the entire lead terminal. This helps reduce the risk of compromising the tight sealing of the lead terminals. As a result, loss of hermeticity in the sealed lead terminal with respect to the molded part can be reduced (see, e.g., page 8, lines 17-27 of the specification).

McLellan et al. fail to teach or suggest indenting a main cutting notch on at least one of obverse and reverse surfaces of a lead terminal in a step before molding a molded part while leaving an unnotched portion between the main notch and each longitudinal side surface of the lead terminal, indenting a cutting sub-notch at the unnotched portion

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in a step after molding the molded part, and then cutting the lead terminal at the main notch and the sub-notch, as required by claim 2.

The present process of claim 2 requires an order of indenting the main notch before molding while leaving the sub-notch portion unnotched, molding, then indenting the sub-notch after the molding. This order of process helps prevent molten synthetic resin from entering and curing in the main notches during molding and thus helps avoid formation of synthetic resin burrs, which usually requires a significant amount of work to remove. McLellan et al. merely discuss etching a lead frame, while being completely silent as to avoiding formation of burrs of synthetic resin. There would be no reason to leave an unnotched portion before molding and indenting a sub-notch after molding in McLellan et al., rather than to etch a cavity across the entire lead frame strip 100 as illustrated in Figs. 2A-2G of McLellan et al.

For at least these reasons, claim 2 is patentable over McLellan et al. Claims 5 and 6 depend from claim 2 and are patentable along with claim 2 and need not be separately distinguished at this time. Applicant is not conceding the relevance of the rejection to the remaining features of the rejected claims.

Applicant notes that claim 8 is listed as being rejected in the Office Action Summary Sheet, but not mentioned in any rejection in the Detailed Action. Therefore, Applicant assumes that claim 8 is allowable. In any event, claim 8 is allowable at least for the same reasons as claim 2, from which it ultimately depends.

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In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 455-3804.

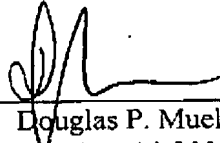


Respectfully submitted,

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By: _____


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